ABSTRACT OF THE DISCLOSURE

The present invention is directed to apparatus and methods for producing homogenous cavitation. An ultrasound souce comprising an ultrasound transmitting element having an axis and a cross-section along the axis is disclosed. The ultrasound transmitting element also has a first axial end and a second axial end operable to produce ultrasonic waves. The cross-section has an area having a maximum value at the first axial end and a minimum value at the second axial end. A method for producing homogenous cavitation at an area of skin comprises creating a volume of fluid having a uniformly dispersed concentration of cavitation nuclei adjacent the area of skin. Ultrasound is then applied to the volume of fluid and causes cavitation at the cavitation nuclei.

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